(No Model.)

J. W. H. DOUBLER.

CHAIR.

No. 250,506. Patented Dec. 6, 1881.

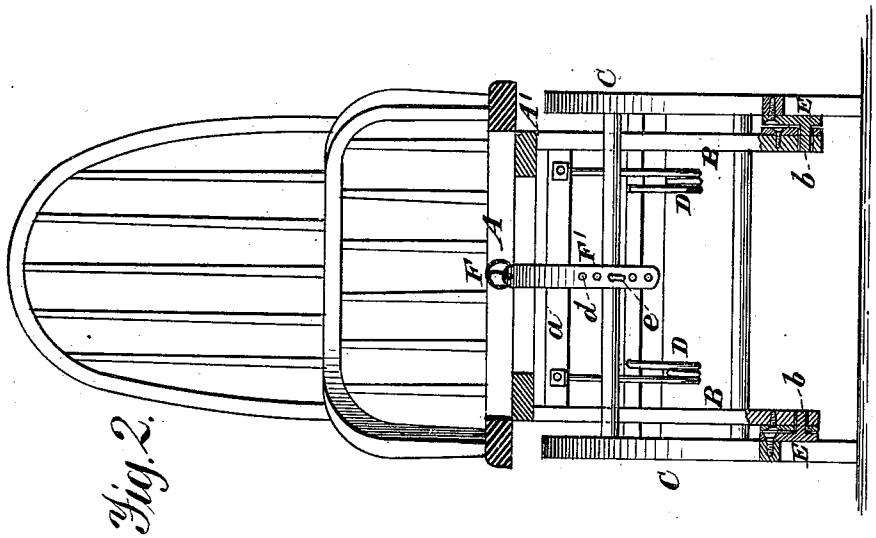


Fig. 2.

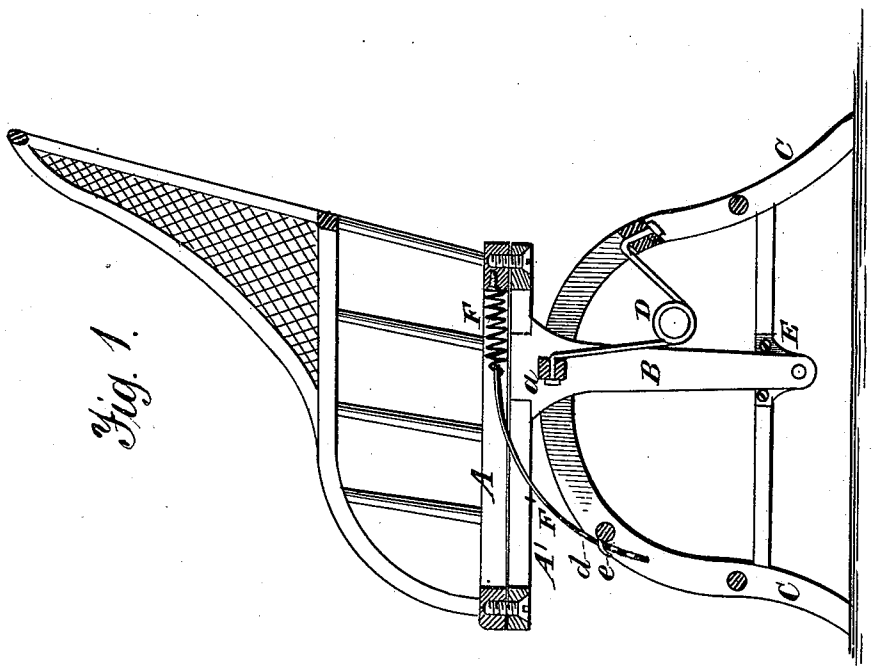


Fig. 1.

Witnesses.
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Harry Bernhard.

J. W. H. Doubler
Inventor.
By his Atty's
Edson Bros.

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN W. H. DOUBLER, OF ROCKFORD, ASSIGNOR TO HIMSELF, ALPHEUS C. BURPEE, OF SAME PLACE, AND EDWIN S. SIBLY, OF CHICAGO, ILL.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 250,506, dated December 6, 1881.

Application filed May 20, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. H. DOUBLER, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a vertical section of my improved tilting chair, and Fig. 2 is a front elevation thereof.

This invention appertains to improvements in tilting chairs, having for its object to compensate for difference in weight of the occupants of the chair and to adjust or take up slack of the spring; and it consists in the details of construction and combination of parts, substantially as hereinafter fully set forth and claimed.

Referring to the accompanying drawings, A is the seat-frame, to the under side of which is fastened a supplemental frame, A′, arranged to occupy a position partially inside of the seat-frame.

B B are parallel opposite uprights, mortised preferably into the sides of the frame A′, connected to the legs C by a centrally-looped spring, D, the inner end of which is fastened to a cross-piece, *a*, of the uprights, and having at their lower ends iron-faced holes or apertures.

E E are plates bolted or screwed to cross side pieces of the legs C, and having studs *b* entering the holes or apertures in the lower ends of the uprights B, by which the seat-frame is adapted to be tilted by the occupant. The springs D primarily serve to hold the seat-frame uprights B in their normal or upright position. They also yield to the tilting backward of the seat, and tend to throw the seat forward as pressure is removed therefrom.

F is another spring, preferably coiled, having one end fastened to the inside of the seat-frame A, and its other end provided with a forwardly-extended flat metal piece or strap, F′, having a number of adjusting-holes, *d*, with which engages a hook or projection, *e*, upon the forward round or cross-piece of the legs C. This spring serves to compensate for additional weight of heavier occupant that may seat himself in the chair or to prevent the sudden springing backward of the chair. The adjustment of the spring permits of taking up of slack or wear to preserve the desired tension.

Having thus fully described my invention, I claim and desire to secure by Letters Patent—

1. In a tilting chair, the combination, with the seat-frame A A′, standards B, and legs C, having a hook or projection, *e*, of the spring F and strap F′, the latter having adjusting-perforations *d*, substantially as and for the purpose set forth.

2. In a tilting chair, the combination of the frame A A′, standards B, pivoted at their lower ends, as shown, with springs D and F, adjusting-strap F′ *d*, and projections *e*, all constructed and arranged substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. H. DOUBLER.

Witnesses:
JUSTUS E. EDWARDS,
H. C. MARSH.